

Human IGF1R/CD221 Protein

Cat. No. IGF-HM41R



Description

Source	Recombinant Human IGF1R/CD221 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus
	It contains Glu31-Asn932.
Accession	P08069
Molecular Weight	The protein has a predicted MW of 105.8 kDa (alpha subunit) and 23 kDa (beta subunit). Due to glycosylation, the protein migrates to 110-120 kDa (alpha subunit) and 52-55 kDa (beta subunit) based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

Formulation and Storage

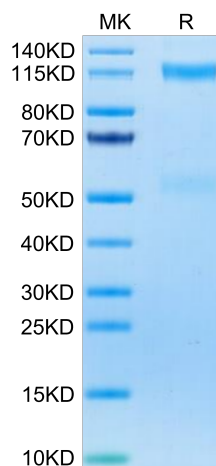
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

The type 1 IGF receptor (IGF1R) is a transmembrane tyrosine kinase that is frequently overexpressed by tumours, and mediates proliferation and apoptosis protection. IGF signalling also influences hypoxia signalling, protease secretion, tumour cell motility and adhesion, and thus can affect the propensity for invasion and metastasis. Therefore, the IGF1R is now an attractive anti-cancer treatment target.

Assay Data

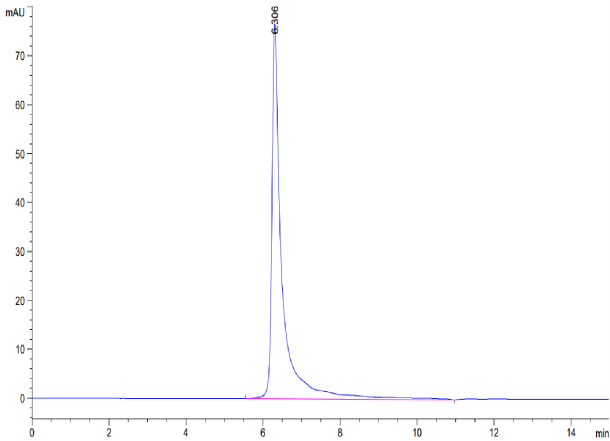
Bis-Tris PAGE



Human IGF1R on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data



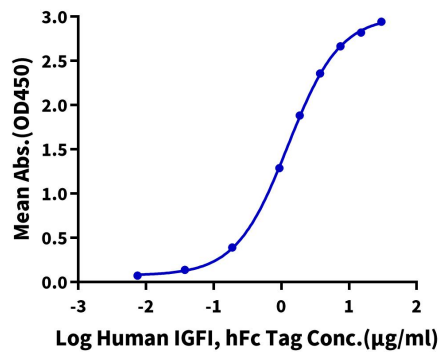
The purity of Human IGF1R is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human IGF1R, His Tag ELISA

0.5µg Human IGF1R, His Tag Per Well

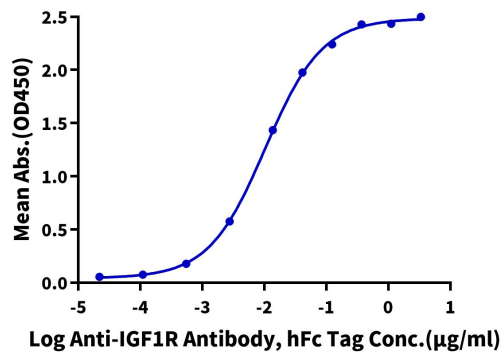


Immobilized Human IGF1R, His Tag at 5 µg/ml (100 µl/well) on the plate. Dose response curve for Human IGF1, hFc Tag with the EC50 of 1.25 µg/ml determined by ELISA (QC Test).

ELISA Data

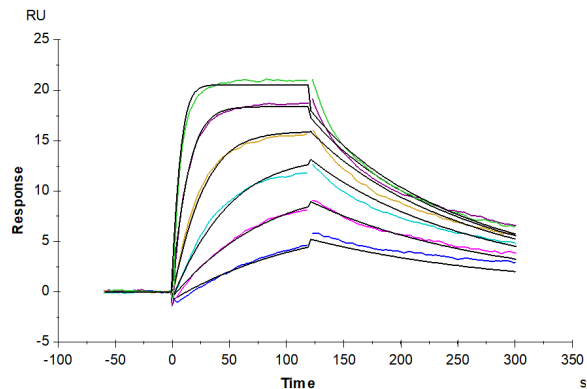
Human IGF1R, His Tag ELISA

0.02µg Human IGF1R, His Tag Per Well



Immobilized Human IGF1R, His Tag at 0.2 µg/ml (100 µl/Well) on the plate. Dose response curve for Anti-IGF1R Antibody, hFc Tag with the EC50 of 10.4 ng/ml determined by ELISA.

SPR Data



Human IGF1R, His Tag captured on CM5 Chip via Protein A can bind Human IGF1, No Tag with an affinity constant of 8.70 nM as determined in SPR assay (Biacore T200).